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EXAMINER	
LESPERANCE, JEAN E	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/575,129	LAPSTUN ET AL.	
	Examiner	Art Unit	
	Jean E. Lesperance	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27,29-66,68,69,71-167,169-172 and 177-180* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27,29-66,68,69,71-167,169-172 and 177-180* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 May 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/19/06, 1/27/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed June 19, 2006 is entered and claims 1-27, 29-66, 68, 69, 71-167, 169-172, and 177-180 are pending.

Response to Arguments

2. Applicant's arguments filed June 19, 2006 have been fully considered but they are not persuasive. The applicant argued that the prior art does not teach that "prints coded data (indicative of a surface identity and a plurality of reference points on the surface) and visible information (relating to the computer software) substantially simultaneously and via different color channels. Examiner disagrees with the applicant because upon further consideration, a new ground of rejection is made in view of US Patent # 5,586,787 ("Brown et al."). Brown et al. teach the visible portion of the variable indicia will not match the normally invisible photoluminescent indicia which were simultaneously printed on the original record (column 5, lines 40-43) where it is inherent in a printer to have different channels. Therefore, the rejection is maintained.

The applicant is advised to read the following pertinent prior arts: 6,021,196 by Sandford, II et al, 6,681,028 by Rodriguez et al., 6,311,214 by Rhoads, 6,448,979 by Schena et al., 6, 647,130 by Rhoads, and 5,841,978.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 - 10, 34 - 36, 38 - 46, 49 - 52, 5, 65, 66, 68, 69, 75 - 77, 82 - 91, 114, 119 - 121, 123- 131, 134 - 140, 150 - 154, 158 - 162, 167, and 177-180 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman, USPN 6,330,976 B1 in view of Berson et al. USPN 6,039,257.

Claims 1, 3, 4, 6, 82, 84 - 86, 88, and 89. Dymetman teaches a method and system of enabling user interaction with computer software running in a computer system. An interface surface (hardcopy document 2) contains information relating to the computer software and having disposed therein or thereon coded data indicative of an identity of the interface surface (first set of markings 208 that uniquely identifies the page) and a plurality of reference points of the interface surface (second set of markings 202 that identifies position). Dymetman, col. 8, lines 45 - 67; col. 12, lines 29 - 46; and figures 1 - 3. The coded data is printed onto the surface is substantially invisible to an unaided human eye. Dymetman, col. 11, line 46 - col. 12, line 28. Col. 12, lines 59 - 67, and figure 4.

A sensing device (pointer 502) senses at least some of the coded data when the sensing device is placed in an operative position relative to the interface surface. Dymetman, col. 8, lines 45 - 67; col. 15, lines 29 – 44, and figures 1, 2, & 8. The sensor

uses at least some of the decoded coded data to generate indicating data indicative of the identity of the interface surface (first set of markings 208 that uniquely identities the page); and at least one of a position (second set of markings 202 that identifies position) and a movement (col. 35, lines 12 - 19) of the sensing device relative to the interface surface. Dymetman, col. 9, lines 17 – 23, col. 12, lines 29-46; and figures 1-3.

The method including the steps of, in the computer system: (a) receiving the indicating data from the sensing device; (b) using the indicating data to identify at least one interactive element relating to the computer software; and (c) operating the computer software in accordance with instructions associated with the at least one interactive element. Dymetman, col. 10, lines 11 - 67, col. 18, lines 39 - 55', col. 24, lines 1 - 12, and figure 13.

Dymetman does not specifically teach that the invisible coded data is printed onto the surface by means of a printer, which also prints the visible information.

Berson teaches a printer (52) that prints both visible information (indicia 11) and invisible coded data (bar code 31). Benson, col. 2, lines 30 – 37, col. 3, lines 34, 48 - 62., col. 4, line 44., col. 5, lines 6 - 10, 43 - 46, 55,* and figures 1-3.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the printer that can print both visible information and invisible coded data as taught by Berson with the method and system as taught by Dymetman to provide a single printer for both printing jobs.

Claims 2, 5, 83, and 87. Dymetman teaches that the interactive element is associated with a zone (zone or cell 202) of the interface surface, and step (b) includes

using at least one of the position (second set of markings 202 that identifies position) and the movement of the sensing device to identify the zone and thereby the interactive element. Dymetman, col. 12, lines 29 - 46., and figure 3.

Claims 7-10, 90 and 91. Dymetman teaches a hyperlink element relating to the computer software and a method including the step of effecting, in the computer system, an operation associated with the hyperlink element. Dymetman, col. 5, lines 39 - 44.

Claims 34 and 119. Dymetman teaches that each tag is indicative of the identity (page identifier (pid) or sticker identifier (pid')) of the region and the position (location code (loc or 1oc')) of the tag within the region. Dymeman col. 9, lines 16 - 22.

Claims 35 and 120. Dymetman teaches that each of the tags includes first identity data defining a relative position (location code (loc or 1oc')) of that tag; and second identity data identifying the surface (page identifier (pid) or sticker identifier (pid')).

Claims 36 and 121. It is inherent that the surfaces described by Dymetman may be defined by a substrate.

Claims 38 - 43, 73 - 77, 123 - 128, and 158 - 162. Dymetman show these patterns. Dymetman, figures 3 and 58-10.

Claims 44 and 129. Dymetman teaches that each of the each of the tags (zone or cell (202) includes at least one conmen feature (orientation marker 206) in addition to the second identity data (first set of markings 208 that identifies the page). (The first

identity data corresponds to the second set of markings 202 that identifies the position on the page.) Dymetman, col. 12, lines 30 - 46; and figure 3.

Claims 45 and 130. Dymetman teaches the orientation marker 206 that is configured to assist finding and/or recognition of the tags by associated tag reading apparatus. Dymetman, col.12, lines 30 - 46., and figure 3.

Claims 46 and 131. Dymetman shows that each cell (zone or cell 202) has a orientation marker, thus incorporating redundancy of information. Dymetman, col.12, lines 30 - 46; and figure 3.

Claims 49 and 134. Dymetman teaches that each of the tags (zone or cell 202) includes at least one orientation feature (orientation marker 206) for enabling a rotational orientation of the tag being read to be ascertained. Dymetman, col. 12, lines 30 - 46; and figure 3.

Claims 50 and 135. Dymetman shows that each cell (zone or cell 202) has a orientation marker, thus incorporating redundancy of information. Dymetman, col. 12, lines 30 – 46, and figure 3.

Claims 51 and 136. Dymetman shows a pattern in figure 3 where the orientation features are rotationally asymmetric.

Claims 52 and 137. Dymetman shows identifiers that are skewed along a major axis. Dymetman, figure 5B. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the same skewing for the orientation feature.

Claims 55 and 140, Dymetman teaches that each tag (zone or cell 202) includes a plurality of tag elements, the first (second set of markings 202 that identifies the

position on the page) and second identity data (first set of markings 208 that identifying the page) each being defined by a plurality of the elements. Dymetman, col. 12, lines 30 - 46) and figure 3.

Claims 65 and 150. Dymetman shows that each cell (zone or cell 202) has first identify data (second set of markings 202 that identifies the position on the page), thus incorporating redundancy of information. Dymetman, col. 12, lines 30 - 46; and figure 3.

Claims 66 and 151. Dymetman shows that each cell (zone or cell 202) has second identify data (first set of markings 208 that identifies the page), thus incorporating redundancy of information. Dymetman, col. 12, lines 30 - 46*, and figure 3.

Claim 152. It is inherent to Dymetman that the tags are printed out onto the surface by means of a printer.

Claims 68 and 153. Dymetman and Berson teach that printer is an ink printer. Dymetman, col. 1, lines 63 - 65., Berson, col. 3, lines 48 - 62.

Claims 69 and 154. Dymetman and Berson teach that the tags are printed using ink that is absorbent or reflective in the ultraviolet spectrum. Dymetman, col. 11, lines 52 - 62; Berson, col. 3, lines 48 - 62.

Claims 114 and 167. Dymetman and Berson teach that the coded data is printed onto the surface to be substantially invisible to an unaided human eye. Dymetman, col. 11, line 46 - col.12, line 28,. col. 12, lines 59 - 67., and figure 4,. Berson, col. 3, lines 48 - 62.

Claims 177 - 180. Dymetman teaches that at least some of the visible information

represents the interactive element. The interactive element is associated with a region of the interface surface such that when the sensing device is placed in an operative position relative to the interactive element, the sensing device senses coded data provided within the region and generates the indicating data using the sensed coded data. The method includes, in the computer system, using the indicative data to identify the region and thereby the interactive element. Dymetman, col. 10, lines 11 - 67,* col. 18, lines 39 - 55,. col. 24, lines 1 - 12., and figure 13.

Claims 11 - 13, 71, 72, 78, 92 - 96, 155 - 157, and 163 are rejected U.S.C. 103(a) under 35 as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Lesnick et al; USPN 4,760,606.

Claims 11 - 13 and 94 - 96. Dymetman teaches filling in multi-choice paper forms. Dymetman, col. 31, line 26.

Although inherent to such processing data from multi-choice paper forms, Dymetman does not specifically teach that the method includes the steps of identifying, in the computer system, that the user has entered a hand-drawn mark by means of the sensing device and effecting, in the computer system, an operation associated with the checkbox field. Lesnick teaches identifying, in a computer system, that the user has entered a hand-drawn mark by means of the sensing device and effecting, in the computer system, an operation associated with the checkbox field. Lesnick, col. 5, lines 1 - 5*, and figure 6.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the identifying system of as taught by Lesnick with the method and system as taught by Dymetman to allow the user to enter marks identifying the document and desired options for the document. Lesnick invites such combination by teaching,

Accordingly, it is a principal object of this invention to provide an efficient means of digitizing multiple specimens (or documents).

Also, it is an object of the invention to greatly reduce the need for user dependency, and thus increase automation, during the digitizing process.

Further, it is an object of this invention is to efficiently classify and file the digitized documents, Lesnick, col. 1, lines 33 - 40.

Claims 70 and 155. Lesnick show that the printer also prints additional information onto the surface. Lesnick, figure 6.

Claims 71, 72, 156, and 157, Dymetman teach that the information is printed onto the surface using colored inks, including cyan, magenta, and yellow inks. CMY is an acronym for cyan, magenta, and yellow.

Claims 78 and 163. Lesnick shows additional non-tag information disposed on the surface. Lesnick, figure 6.

Claims 92 and 93. Lesnick teaches that data indicative of a name and/or value of at least one field related to the computer software and of a selected object, Lesnick, figure 6.

4. Claims 14 - 17 and 97 - 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Tran, USPN 6,157,935.

Claims 14 - 17 and 97-100, Dymetman teaches entering and decoding handwritten text data. Dymetman, col. 30, line 65 - col. 31, line 40.

Although inherent to the method of entering and decoding handwritten text data, Dymetman does not specifically teach identifying, in the computer system, that the user has entered handwritten text data by means of the sensing device and effecting, in the computer system, an operation associated with the text field.

Tran teaches that the interactive element is a text field relating to the computer software and identifying and converting, in the computer system, that the user has entered handwritten text data by means of the sensing device and effecting, in the computer system, an operation associated with the text field. Tran, col. 2, lines 53 - 56., and col. I 1, line 3 - col. 12, line 14.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the handwritten text data system and method as taught by Tran with the method and system as taught by Dymetman to produce such system and method that would utilize easily entered handwritten notations on a hardcopy document. Tran invites such combination. Tran, col. 1, line 60 - col. 2, line 50.

5. Claims 18 - 22 and 101 - 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Obata et al; USPN 6,002,783.

Claims 18 - 22 and 101 - 105. Dymetman teaches that the interactive element may define a signature field. Dymetman, col. 17, lines 29 - 30.

Dymetman does not specifically teach that the interactive element is a signature field relating to the computer software, and that the method includes identifying, in the computer system, that the user has entered a handwritten signature by means of the sensing device and effecting, in the computer system, an operation associated with the signature field.

Obata teaches teach that the interactive element is a signature field relating to the computer software, and that the method includes identifying, in the computer system, that the user has entered a handwritten signature by means of the sensing device and effecting, in the computer system, an operation associated with the signature field. Obata, col. 5, lines 16 - 4. 9, and figure 3.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the signature field of Obata with the method and system as taught by Dymetman to produce a system and method to inexpensively verify the user. Obata invites such combination by teaching,

There have been various object identification systems such as an image checking system using images of fingerprints, a voice checking system using voices such as voiceprints. Among them, a scripture checking system using hand-written signatures of card carriers is considered useful because of its simple hardware structure, low manufacturing cost and less handling difficulty.

Such signature checking systems are used in various fields. ...Obata, col. 1, lines 23 - 34.

6. Claims 23 - 26, 29, 32, 106 - 108, 1 12, 115, and 1 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Cass, USPN 5,692,073.

Claims 23, 25, 106, and 108. Dymetman teaches that the interactive element may produce a drawing field. Dymetman, col. 17, lines 2 - 35; and col. 30, line 65 - col. 31, line 40.

Although inherent to the method of entering and decoding a drawing field, Dymetman does not specifically teach identifying, in the computer system, that the user has entered a hand-drawn picture by means of the sensing device and effecting, in the computer system, an operation associated with the drawing field.

Cass teaches a drawing field related to the computer software and identifying, in the computer system, that the user has entered a hand-drawn picture by means of the sensing device and effecting, in the computer system, an operation associated with the drawing field. Cass, col. 14, lines 8 - 24,' col. 14, line 53 - col. 15, line 32', and figures 13 - 19.

let would have been obvious to one of ordinary skill in the art at the time of the invention to combine the on demand printing ms taught by Cass with the method and system as taught by Bennett and Lesnick to produce a system and method to more easily input computer data. Cass invites such combination by teaching.

A paper-based user interface can serve as a complement or substitute for

the more conventional keyboard-mouse-display type of user interface mentioned earlier. A paper-based user interface is particularly appealing when the user interacts with a computer network directly through a multifunction device, without recourse to a personal computer or workstation. In this situation, the user can initiate a number of functions, such ms document copying, facsimile, electronic mail, document storage, and search using a simple paper form as an interface. The multifunction device "reads" what is on the form and responds accordingly, possibly with help from the network.
Cass, col. 2, lines 17 - 28.

Claims 24 and 107, Dymetman teaches activating, in the computer system, a hyperlink. Dymetman, col. 5, lines 39 - 44.

Claims 26 and 112, Cass teaches printing the interface surface on demand. Cass, col. 17, lines 4 - 36.

Claims 29 and 115, Cass teaches retaining a retrievable record of each interface surface printed, the interface surface being retrievable using the identity contained in its associated coded data. Cass, col. 10, line 12 - col. 11, line 5., col. 11, lines 15 - 33., and col. 17, lines 37 - 49.

Claims 32 and 116. Cass teaches providing sufficient coded data relating to the computer software in the interface surface to eliminate the need for a separate display device. Cass, col. 2, lines 17 - 28., col. 7, lines 28 - 34.

8. Claims 27 and 1 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman, Berson, and Cass as applied to claims 26 or 1 12 above, and further in view of LaMarca et al; USPN 6,279,013 B1.

Claims 27 and 113. Although it may be inherent to the system as taught, Dymetman does not specifically teach substantially simultaneously printing the interface surface and the coded data onto a substrate.

LaMarca teaches substantially simultaneously printing the interface surface and the coded data onto a substrate. LaMarca, col. 5, lines 4 - 12 and 34 - 40; and figures 1 and 2. LaMarca also teaches a printer 40 for printing a document 10 and 42. LaMarca, figures 1 and 2. LaMarca teaches a user interactive element (tokens 18, 20, 22, 24, 60, 62, 64, and 66) with coded data (data glyphs) indicative of an identity of the document and an identity of the at least one user interactive element. LaMarca, col. 3, lines 59 - 64,. col. 5, lines 1 - 5., col. 6, lines 1 - 8', and figures 1 - 4. LaMarca teaches a sensing device (smart wand 70) for interacting with the at least one user interactive element and transmitting request data to the computer system to facilitate the further directory information being sent from the computer system to the printer for printing in a further document, the request data being indicative of the identity of the document and an identity of the at least one user interactive element. LaMarca, col. 5, lines 16 - 26., col. 6, lines 24 - 52', and figure 5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine simultaneous printing of the directory entries and coded data as taught by LaMarca with the method and system for navigating a directory as taught by Cass. LaMarca invites such combination by teaching.

The present invention contemplates a new and improved system, which overcomes the prolix disadvantages of mass media print communication to effectively

combine the advantageous features of the two relevant technologies. That is, the customized newspaper which can now be read on an electronic display, is combined with the affordances and conveniences of a printed paper interface, for a resulting interactive newspaper, customized to a subscriber- identified profile.

LaMarca, col. 1, line 65 - col. 2, line 6. See also LaMaroa, col. 2, line 64 - col. 3, line 17.

Claims 30 and 1 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Microsoft Press Computer Dictionary 3rd Ed (41997).

Claims 30 and 117. Dymetman does not specifically teach multicast or Pointcast communications protocols.

Microsoft Press Computer Dictionary teaches multicast and Pointcast communications protocols. Microsoft Press Computer Dictionary, pp. 300, 318, and 371.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine such protocols ms taught by the Microsoft Press Computer Dictionary with the method and system as taught by Dymetman to provide a push technology where the server automatically uploads data without a specific command from the client." Dictionary, p. 371.

7. Claims 31, 1 10, and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Junod et al; USPN 5,854,621.

Claims 31, 110, and 111. Dymetman does not teach that the sensing device containing an identification means that imparts a unique identity to the sensing device and identifies it ms belonging to a particular user, wherein the method includes the step of monitoring, in the computer system, said identity.

Junod teaches that the sensing device containing an identification means that imparts a unique identity to the sensing device and identifies it as belonging to a particular user, wherein the method includes the step of monitoring, in the computer system, said identity. Junod, col. 5, lines 34 - 53,. and figure 4.
It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the sensing device identifier as taught by Junod with the sensing device as taught by Dymetman to provide a method to identify the sensing device. Junod invites such combination. Junod, col. L, line 57 - col. 2, line 13., col. 9, lines 48 - 64.

Claims 33 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman et al, and Berson et a1.; or Dymetman et al, and Berson et a1., in view of Cass, as applied to claims 1 12 above, and further in view of Kobayashi et al, USPN 5,881,352.

Claims 33 and 118. Dymetman does not teach that wherein the interface surface is printed on multiple pages, the method including the step of binding the pages. Kobayashi et al teaches a means for binding the document in the event the document includes a plurality of pages. Kobayashi, col. 1, lines 7 - 21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the binder of Kobayashi with the system of Dymetman Berson, or

Dymetman, Berson, Such combination provides easy binding of collected sheets and covers without manual labor. Kobayashi, col. 2, lines 36 - 48.

Claims 37 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Kaule, USPN 6,302,989 B1.

Claims 37 and 122. Dymetman does not teach that the substrate is laminar. Kaule teaches a laminar substrate. Kaule, col. 3, lines 27 - 45) col. 4, lines 6 - 10; and figure 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the laminar substrate as taught by Kaule with the method and system as taught by Dymetman to protect the tags, that is the optically variable element, on the surface.

Claims 47, 48, 56 - 64, 109, 132, 133, and 141 - 149 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70 above, and further in view of Sekendtm USPN 5,477,012.

Claims 47, 48, 132, and 133. Dymetman does not specifically teach that the common feature is rotationally symmetric or ring shaped. Sekendtm teaches that the feature that is rotationally symmetric so ms to be rotationally invariant and is ring-shaped. Sekendtm col. 4, lines 28 - 41,. and figures 1-2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the ring-shaped feature as taught by Sekendtm with the method and invention as taught by Dymetman to produce compact, rotationally invariant tags.

Claims 56 and 141. Sekendtm teaches that the tag elements are disposed in one or more arcuate bands around a central region of each tag. Sekendur, col. 4, lines 28 - 41; and figures 1-2.

Claims 57 and 142, Sekendur teaches that there are a plurality of the arcuate bands disposed concentrically with respect to each other. Sekendur col. 4, lines 28 - 41; and figures 1-2.

Claims 58, 59, 143, and 144. Sekendlzr shows a center circle that forms a small dot. The dot may have two values, black or white. Sekendur, col. 4, lines 28 - 41; and figures 1-2.

Claims 60 and 145. It is inherent to any of the systems and methods of Dymetman, and Sekendur that wherein when representing one of the possible values, the tag elements absorb, reflect or fluoresce electromagnetic radiation of a predetermined wavelength or range of wavelengths to a predetermined greater or lesser extent than the surface. See e.g. Dymetman, col.11, lines 47 - 62. See specifically Sekendm, col. 4, lines 15 - 27 and 50 - 59.

Claims 61 and 146. It is inherent to any of the systems and methods of Dymetman, and Sekendur that the possible values of the tag elements are defined by different relative absorption, reflection or fluorescence of electromagnetic radiation of a predetermined wavelength or range of wavelengths. See e.g. Dymetman, col. 11, lines 47 – 62, lines 15 - 27 and 50 - 59.

Claims 62 and 147, Both Dymetman and Sekendur teach that the tags are not substantially visible to an average unaided human eye under daylight or ambient lighting conditions. Dymetman col. 11, lines 47 - 62. Sekendur, col. 4, lines 26 - 27.

Claims 63 and 148, Dymetman teaches that the tags are slightly visible to an average unaided human eye under daylight or ambient lighting conditions. Dymetman, col. 7, lines 59-62.

Claims 64 and 149. Dymetman teaches that the tags are visible to an average unaided human eye under daylight or ambient lighting conditions. Dymetman, col. 11, lines 63 - 65.

Claim 109, Sekendlzr teaches a sensing device (pen shaped optical conduit 8) includes a marking nib (writing element 9). Sekendur, col. 4, line 60 - col. 15,. and figures 6 & 7.

Claims 53, 54, 79 - 8 1, and 164 - 166, 169 - 172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Berson et al. as applied to claims 1, 4, 67, or 70, above, and further in view of Belmett et al; USPN 5,051,736.

Claims 53, 54, 138, 139, 169 - 172. Dymetman does not specifically teach a perspective feature.

Belmett teaches includes perspective feature for enabling a perspective distortion of the tag being read to be ascertained. Bennett col. 11, lines 59 - 62.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the perspective feature as taught by Bennett with the method and

system as taught by Dymetman to provide a stylus that "is not rotationally nor title angle (stylus/tablet) constrained." Bermett, col. 3, lines 28 - 31.

Claims 79 and 164. Bennett teaches that, using a string of 11 bits, the number of unique TAC address is about 45 billion. Bennett, col. 10, lines 50 - 55. It would have been obvious to one of ordinary skill in the art at the time of the invention to increase the string length of Bennett to increase the number of unique TAC addresses to 1015 to provide increase resolution if needed.

Claims 80, 81, 165, 166. Bennett teaches that each TAC has a size of 250 by 250 microns which is smaller than 10 millimeters. Thus, any 10 millimeter diameter sub region of the region includes sufficient coded data to identify the region. Bennett, col. 15, lines 28-52.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:OOAM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

Art Unit 2629

Date 8/16/2006

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600